

---

## **CURRICULUM VITAE**

*Michael Wassenegger*  
Fraunhofer Institute for  
Molecular Biology and  
Applied Ecology  
Schellingstrasse 22  
80799 Munich  
Germany

---

### *Curriculum vitae*

---

## **PERSONAL DATA**

Born: 10<sup>th</sup> of August 1956 in Bonn, NRW  
Address: Fraunhofer Institute for  
Molecular Biology and Applied Ecology (IME)  
Department Epigenetic  
Worringerweg 1  
52074 Aachen  
Germany  
Tel.: +49 (0)89 28779881  
FAX: +49 (0)89 282443  
E-mail: wassenegger@molbiotech.rwth-aachen.de

Address pers.: Schellingstrasse. 22  
80799 Munich  
Germany  
Tel.: +49 (0)89 282443

## **EDUCATION**

Studies: Biology, University of Cologne / Max-Planck-Institute for Plant  
Breeding Research, Cologne Vogelsang, 1977-1984, Diploma 1984  
  
Dissertation: University of Cologne / Max-Planck-Institute for Plant Breeding  
Research, Cologne Vogelsang, Group of Dr. Koncz, Depart. Prof.  
Schell, 1984-1988

Habilitation: Rheinisch-Westfälische Technische Hochschule Aachen, 2001

## **EMPLOYMENT**

- 1984 - 1988: PhD student at the MPI for Plant Breeding Research in Cologne, Group of Prof. Otten (1984), Group of Prof. Willmitzer (1985), Group of Dr. Koncz (until 1988), Depart. Prof. Schell
- 1988-1993: Head of team at the Max-Planck-Institute for Biochemistry in Martinsried, Depart. Prof. Sängers
- 1993 - 1995: Max-Planck research stipend and head of team at the Max-Planck-Institute for Biochemistry in Martinsried, Depart. Prof. Sängers
- 1995 - 1998: DFG habilitation stipend and head of team at the Max-Planck-Institute for Biochemistry in Martinsried, Depart. Prof. Sängers
- Since 1999: Fraunhofer Institute for Molecular Biology and Applied Ecology, Head of the Epigenetic department  
([http://www.ime.fraunhofer.de/molbio/abt\\_epigen/index.htm](http://www.ime.fraunhofer.de/molbio/abt_epigen/index.htm))

## **MEMBERSHIPS**

Society for Molecular Biology und Biochemistry (GMB)

## **REGULAR REVIEWING**

EMBO Journal, European Journal of Biochemistry, FEBS Letters, Journal of Cell Science, Journal of Virology, Molecular & General Genetics, Plant Biotechnology Journal, Plant Molecular Biology, RNA, Theoretical Applied Genetics, The Plant Cell, The Plant Journal, Transgenic Research, Trends in Plant Science, Trends in Plant Virology

Munich, 14<sup>th</sup> of April 2003

*Michael Wassenegger*

## PUBLICATIONS

### **Research Publications:**

- Wassenegger M., Heimes S., Riedel L. and Sanger H. L.** (1994). RNA-directed *de novo* methylation of genomic sequences in plants. *Cell* **76**: 567-576.
- Wassenegger M., Heimes S. and Sanger H. L.** (1994). An infectious viroid RNA replicon evolved from an *in vitro*-generated noninfectious viroid deletion mutant via a complementary deletion *in vivo*. *EMBO J.* **13**: 6172-6177.
- Riedel L., Putz A., Hauser M.-T., Luckinger R., Wassenegger M. and Sanger H. L.** (1995). Characterization of the SRP RNA population of tomato. *Plant Mol. Biol.* **27**: 669-680.
- Riedel L., Volger U., Luckinger R., Putz A., Sanger H. L. and Wassenegger M.** (1996). Molecular analysis of the gene family of the signal recognition particle (SRP) RNA of tomato. *Plant Mol. Biol.* **31**: 113-125.
- Wassenegger M., Spieker R., Riedel L., Thalmeir S., Gast F.-U. and Sanger H. L.** (1996). A single nucleotide substitution converts potato spindle tuber viroid (PSTVd) from a noninfectious to an infectious RNA for *Nicotiana tabacum*. *Virology* **226**: 191-197.
- Schiebel W., Pelissier T., Riedel L., Thalmeir S., Schiebel R., Kempe D., Lottspeich F., Sanger H. L. and Wassenegger M.** (1998). Isolation of a RNA-directed RNA polymerase-specific cDNA clone from tomato leaf-tissue mRNA. *Plant Cell* **10**: 2087-2101.
- Pelissier T., Thalmeir S., Kempe D., Sanger H. L. and Wassenegger M.** (1999). Heavy *de novo* methylation at symmetrical and non-symmetrical sites is a hallmark of RNA-directed DNA methylation. *Nucl. Acids Res.* **27**: 1625-1634.
- Pelissier T. and Wassenegger M.** (2000). A DNA target of 30 bp is sufficient for RNA-directed DNA methylation. *RNA* **6**: 55-65.
- Wassenegger M.** (2001). Advantages and disadvantages of using PCR techniques to characterize transgenic plants. *Mol. Biotech.* **17**: 73-82.
- Bonin M., Oberstrass J., Vogt U., Wassenegger M. and Nellen W.** (2001). Binding of IRE-BP to its cognate RNA sequence: SFM studies on a universal RNA backbone for the analysis of RNA-protein interaction. *Biol. Chem.* **382**: 1157-1162.
- Vogt U., Putz A., Razvi F., Pelissier T. and Wassenegger M.** (2003). Viroid-mediated induction of post-transcriptional gene silencing. In preparation.

**Reviews:**

**Wassenegger M. and Pélissier T.** (1998). A model for RNA-mediated gene silencing in higher plants. *Plant Mol. Biol.* **37**: 349-362.

**Wassenegger M. and Pélissier T.** (1999). Signalling in gene silencing. *Trends Plant Sci.* **4**: 207-209.

**Bailey-Serres J., Rochaix J.-D., Wassenegger M., and Filipowicz W.** (1999). Plants, their organelles, viruses and transgenes reveal mechanisms and relevance of post-transcriptional processes. *EMBO J.* **18**: 5153-5158.

**Wassenegger M.** (2000). RNA-directed DNA methylation. *Plant Mol. Biol.* **43**: 203-220.

**Wassenegger M.** (2002a). Gene silencing. *Internat. Rev. Cytol.* **219**: 61-113.

**Wassenegger M.** (2002b). Gene silencing-based disease resistance. *Transgenic Res.* **11**: 639-653.

**Book Contributions:**

**Sänger H. L., Schiebel W., Riedel L., Pélissier T., and Wassenegger M.** (1996). The possible links between RNA-directed DNA methylation (RdDM), sense and antisense RNA, gene silencing, symptom-induction upon microbial infections and RNA-directed RNA polymerase (RdRP). In *Biology of Plant-Microbe Interactions*, G. Stacey, B. Mullin, and P.M. Gresshoff, eds. (St. Paul, MN: American Phytopathological Society), pp. 533-540.

**Wassenegger M.** (1998). Application of PCR to transgenic plants. PCR in Bioanalysis. In *Methods in Mol. Biol.*, **92**, S.J. Meltzer (Humana Press Inc., Totowa), pp. 153-164.

**Depicker A., De Buck S., Müller A. and Wassenegger M.** (2002). Transgene expression. In *Handbook of Plant Biotechnology*, in press.

**Patents:**

**US-Patent** (No.: 6,218,142B1): Nucleic acid molecules encoding polypeptides having the enzymatic activity of an RNA-directed RNA polymerase (RdRP). Date of Patent: 17. 04. 2001.

**EU Patent Application** (No.: 01 11 9348.9): Methods and means for gene silencing in transgenic plants. Submitted 2001.

**Talks:**

1994 - 2002: 25/22 (Home/Abroad)